



**ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
OCTOBER 5, 1995, 9:00 A.M.
EXECUTIVE CONFERENCE ROOM**

Present:	T. A. Coleman	P. F. Miller	J. W. Reincke
	C. J. Arnold	L. R. Brown	H. W. Linne (J. O'Doherty)
	J. D. Davis (D. VandenBerg)		J. Kanillopoolos (R. Maki)
Guest:	T. Fort (FHWA)	W. C. Turner	D. L. Smiley

OLD BUSINESS

1. Approval of the Minutes of the September 7, Meeting - T. A. Coleman

Minutes of the September 7, 1995, meeting were approved as written. Three items were scheduled to be considered again in October, but will be delayed until the November 2, 1995, meeting:

- A. Guardrail Inventory (Report and Recommendation) - R. E. Maki
- B. Research Report R-1336 (Bailey Bridge Load Testing) - J. W. Reincke
- C. Work Zone Certification (Report) - R. E. Maki

2. Mobilization (See September 7, 1995, Minutes) - C. J. Arnold

The Design Division prepared and presented the following recommendation for limiting the unit price for the pay item "Mobilization".

- A. *For Projects up to \$4 Million:* The unit price may be up to five percent of the total project, but cannot exceed \$120,000.
- B. *For Projects Over \$4 Million:* The unit price may be up to three percent of the total project, but cannot exceed \$600,000.

Implementation of this recommendation only places a limit on one pay item and does not direct the industry in how to do their business. This limit will be set by unique pay item for each proposal, giving MDOT the ability to follow this policy while still allowing for special projects that may require new or unique equipment, material, leases or other costly items. It will benefit MDOT by taking Mobilization out of the "Life Cycle Cost Analysis" part of any project by moving the actual cost of work to be incorporated into those pay items that actually pay for the work. This will help assure that we will have truer results when we cost analyze different approaches to providing the desired facility. It will still provide the contractor with the legitimate needed mobilization money while not giving the appearance of a large cash handout when no work has been performed. The limit is accurate and serves the desired purpose without being complicated enough to cause contractual conflicts or difficulties.

ACTION: The EOC approved the recommendation and requested the Design Division to send it to the Michigan Road Builders Association for their review and comment.

NEW BUSINESS

1. Lane Miles - T. A. Coleman

Bob Welke requested that the lane mileage accounting process be reviewed and updated to ensure more accurate numbers and that a realistic picture is being provided. Every year we are adding new lane miles to our system, which has a cascading effect on maintenance budgets. There are three or four different ways being used in the department to count this mileage, and they are not always compatible. A common database is highly desirable, but we need to know what measurement methods are being used now and what the effect would be on divisions/districts if we switched to lane miles, including ramps, center turn lanes, and passing flares.

Bil Turner mentioned that there is a new road segment descriptor being developed by the Bureau of Transportation Planning called Physical Road number, which is intended to be included in a new comprehensive database covering all roads in Michigan. It may be that this new database is being designed with all the factors needed by all Bureau of Highways' users also. Bil Turner will arrange for a presentation about this new effort at the November EOC meeting.

ACTION: For the November EOC, Tom Coleman will request updated lane mileage information from the districts; we will discuss what we are using to measure lane

mileage and what effect there might be if we switch to lane miles including all lane components. Bil Turner will contact Transportation Planning and arrange a brief overview of their efforts to develop the Physical Road number.

Maintenance will decide what they require to accurately portray their budget needs and will include bridge decks, which will also be addressed at the November meeting.

2. **Proposal for MTU Contract Research, "Effectiveness of Materials and Procedures for Sealing Joints and Cracks" - J. W. Reincke**

The objective of the proposed research is to obtain a better understanding of the field performance of various sealant materials installed under different conditions and configurations; and to establish a laboratory protocol that can be used to predict long-term field performance. It is a two year project with MDOT funding at \$100,000 and the university providing another \$25,000. A technical advisory group (TAG) was formed and will oversee the research, including development of the final research work plan/proposal. Progress will be continuously reviewed and there is a high potential for success, both in research results and implementation potential.

ACTION: EOC approved the research project. The Research Laboratory will continue working directly with MTU on development of the final proposal and will initiate the research contract.

3. **Proposal for MTU Contract Research, "The Effects of Cement Properties on PCC Durability" - J. W. Reincke**

The problem statement was reviewed and it was noted that the department is experiencing a recurrence of low strength concrete on some projects, which has been traced back to cement properties and characteristics. The physical and chemical limitations under ASTM C 150 are very broad, permitting a wide variation of cement characteristics for a particular cement type.

The objective of this project is to physically and chemically assess the characteristics of portland cements used in Michigan to determine the potential impact on pavement durability. It is a two year project with MDOT funding at \$130,000 and a university match of \$60,000. A technical advisory group (TAG) was formed and will oversee the research, including the development of the final research work plan and proposal. Progress will be continuously reviewed and there is high potential for success, both in research results and implementation potential.

ACTION: EOC approved the research project. The Research Laboratory will continue working directly with MTU on development of the final proposal and will initiate the research contract.

(Signed Copy on File at M&T)

Jon W. Reincke for
Calvin Roberts, Secretary
Engineering Operations Committee

cc: EOC Members
District Engineers
G. H. Grove G. J. McCarthy L. K. Heinig T. Adams
E. D. Winkler D. L. Coleman W. C. Turner D. L. Smiley
L. W. Martin J. Becsey R. W. Muller R. E. Nordlund
L. E. DeFrain G. L. Mitchell G. J. Bukoski C. W. Whiteside
I. B. Patel R. D. Till M. Newman A. G. Ostensen